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ABSTRACT

The theory of the coordinated management of meaning (CMM) describes the structural relationship between a conversation as it appears in a verbatim transcript and as it appears in the meaning-system of the participants. The five essential features of CMM theory are: a set of four propositions about the nature of communication and human behavior, a hierarchical model of actors' meanings, structural models of constitutive and regulative rules that respectively integrate the hierarchy and organize meanings into guides for action, differentia for comparing actors' rules, and an account of a logic of conversation produced by the conjoining of actors' rules. The utility of this theory is dual: as a diagnostic tool it facilitates the analysis of conversation, and as a heuristic device it generates empirically testable hypotheses regarding the relationship between rule structure variables and the patterns of conversation that people produce. (FL)

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AN EPISODE-DEPENDENT DEONTIC LOGIC OF CONVERSATION

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AN EPISODE-DEPENDENT DEONTIC LOGIC

OF CONVERSATION

Until fairly recently in the development of Western thought, processes of communication have been considered colorless, ordorless vehicles for the transmission of thought and the exercise of influence. This benign neglect of the process of communication per se has yielded to a recognition that even apparently mundane communication events involve powerful processes which affect individuals and social institutions.

There is considerable evidence that those processes by which persons define themselves, negotiate relationships with others, determine what shall be treated as "factual," and develop social institutions occur in the "gaps" between messages in conversations. As persons interpret each other's messages, decide what to say themselves, and characterize their conversations, they create and maintain the "social order."

In this paper, we describe a way of accounting for these processes which is derived from the theory of the coordinated management of meaning (Pearce, 1976; Cronen and Pearce, 1978) and which features the concept of an episode-dependent, deontic logic.

Conversations have been analyzed from a number of differing theoretical positions, but all must account for the fact that communicators seldom say all that they mean or expect to be heard as having said, and that this process seems to work. Much of what occurs in conversation is thus "off-stage," consisting of processes by which persons interpolate or extrapolate meanings from the series of messages which the communicators produce.

That this process works as well as as it does betokens the existence of some form of "logic" which persons use and expect others to be able to follow.

As we develop the concept, the "logic" is seen as descriptive of the systemic

properties of person's rules for meaning and action, rather than being prescriptive, and designates a real "force" affecting person's thoughts and behaviors, rather than being a theorist's standard of validity. The logic of the coordinated management of meaning is thus a theoretical concept which describes the structural relationship between a conversation as it appears in a verbatim transcript and as it appears in the meaning-system of the participants.

In this paper, we present the theory of the coordinated management of meaning (hereafter CMM), then describe its implications for a conversational logic.

THE COORDINATED MANAGEMENT OF MEANING: ESSENTIAL FEATURES

CMM theory sets forth: (1) a set of four propositions about the nature of communication and human behavior; 2) a hierarchical model of actors' meanings; 3) structural models of constitutive and regulative rules which respectively integrate the hierarchy and organize meanings into guides for action; 4) differentia for comparing actors' rules rules, and 5) an account of a logic of conversation produced by the conjoining of actors' rules.

Four Propositions Concerning Human Communication:

The research literature from a variety of disciplines demonstrates the complexity of communication processes and provides descriptions of various phases of those processes. The four propositions below summarize some of this literature. They are the "raw materials" for a model of actors' meanings.

1. Normal adult humans are at least sometimes purposeful actors, not passive reactors to stimuli. The concept of purpose has undergone a renaissance in scientific thought during the past 20 years. This may be traced to the cybernetic revolution and the development of machines that exhibited purpose-like behavior (Rosenblueth, Winer, and Bigelow, 1943). Later Delaney's (1962) hypothesis theory and reanalysis of prior conditioning studies (Brewer, 1972) support the position that human learning is an active process in which subjects attempt to establish

meaningful explanations of their situation and test those explanations by acting and observing results. Neuro-physiological support for this proposition has been generated by the work of Pribram (1976). Together, these findings extend the trend described by Koch (1964) as moving from "behaviorism" to "neo-behaviorism" to "neo-neo-behaviorism" in which each successive retreat reintroduces cognitive or intervening variables into the organism.

2. Meanings are to some degree individual. Two claims are lurking in this proposition: the first is that meaning resides in the perceiving individual and not in the stimulus. The second is that individual's within a culture differ somewhat in their interpretive processes. Research in the "constructivist" tradition established by Kelly (1955) has shown that differences in the content (Kelly, 1962; Lifshitz, 1974; Landfield, 1971) as well as in the number and integration of personal constructs (Crockett, 1964; Delia, 1977; Delia and Clark, 1977; Boynton, 1978) are significantly related to such interpersonal processes as role-taking, person processes as role-taking, person perception, and the maintenance of therapeutic relationships.

3. Meanings are hierarchically organized in a series of levels of abstraction. The concept of hierarchical meanings was introduced by Whitehead and Russell (1927) as the "Theory of Logical Types," and by Wittgenstein (1961) as the problem of reflexivity. The implications of hierarchy for communication were first realized by Bateson (1954) and his disciples, and extended in the clinical work of the "Palo Alto Group" (Jackson, 1968). Hymes (1974) has recognized variables at several levels of abstraction such as intonation, position in an interractional exchange, and social relationships.

Studies of person perception have demonstrated that the process is not amenable to simple averaging or summing operations (Delia, 1976). Rather, the process seems to involve a tacking back-and-forth between specific traits and a holistic image such that change in one attribute may alter the overall impression which, in turn,

contextualizes and redefines the meaning of other specific traits (Delia, 1976; Peabody, 1970).

The work of Rommetviet and Carswell (1971) and their colleagues shows that subjects seem to organize their knowledge and assign meanings to messages by referring to a molar unit of meaning such as a cognitive "model" of a greeting episode and matching individual messages to the molar unit of meaning.

4. Meanings are organized temporarily. Shank (1975) has shown that the intelligibility of messages is dependent upon communicators' sharing an unexpressed script. Clarke (1976) has offered data that show subjects' ability to predict what a message will be is a function of their knowledge of the temporal sequence which preceedes it.Finally, Raush (1965; 1974) using multivariate information theory techniques, has found that the ability to predict the next speech act in a sequence is a function of both the temporally antecedent act, and the molar unit of analysis--the situation in which the human actors are performing.

The Hierarchy Model of Meaning.

The rules which guide action are composed of people's meanings. We suggest representing the structure of people's meanings as a hierarchical model shown in Figure 1.

Figure 1 about here

Level 1. Constructions are the cognitive process by which individuals organize and interpret the world as perceived: "the creative capacity of the living thing to represent the environment and not merely respond to it." The existence of constructs explains why events do not account for experience; an intervening filtering, interpretive process generates the meanings of experience.

Level 2. Construction systems are the beliefs and purposes produced by constructs, organized into clusters which are hierarchically related to particular beliefs.

Studies of person perception have demonstrated that perceptions of a person as a whole are based on perception of his/her attributes, but that once the molar percept is formed, attributes are reinterpreted.

Level 3. Speech acts are those things which one person does to another by saying something, such as "you are beautiful" counts as the speech act "compliment." There are many communicative events which are better understood as "performatives' rather than 'declaratives" whose meanings are acts rather than referents. Some theorists think that all messages invoke meaning on both "content" and "relationship" levels, with "relational" meanings comprising speech acts.

Level 4. Episodes are "communicative routines which communicators view as distinct wholes, separate from other types of discourse, characterized by special rules of speech and nonverbal behavior and often distinguished by clearly recognizable opening or closing sequences." They appear as patterned sequences of speech acts and establish the fields in which the rules governing speech acts exist.

Level 5. Life scripts are patterns of episodes, comprising the person's expectations for the kinds of communicative events which can and probably will occur.

Each of these levels is hierarchically related to the others in this way: the higher level meaning contextualizes and defines the lower. For example, an aspect of the "big, buzzing confusion" may be perceived either by the construction "strong-gentle" or "strong-weak," in which the meaning of "strong" is not quite the same. The construction actually used depends on the person's organization of construction systems, in which "strong-gentle" may be a part of a part of one cluster and "strong-weak" of another. If the perception of, e.g., the Departmental Chairman shifts from one construction system to another, the meaning of his perceived "strength" will change as a function of different constructs. Similarly, the meaning of "you S.O.B.!" differs as a function of its definition as the speech act "friendly greeting" or as "insult," and this determination, in turn, depends on the location of the statement

within an episode "friendly chat" or "personnel evaluation." In each of these instances, the greater freedom to vary is at the lower level: given a particular episode, e.g., "friendly chat," there are any number of ways to perform the speech act "greeting"; but the interpretation of each of these statements is radically changed if the episode is redefined as "personnel evaluation."

Communication Rules: The Organization of Meanings

Theorists in a variety of disciplines have suggested "rule" as a descriptor of the facts that 1) social action exhibits regularities even though persons can behave in capricious or disruptive ways; 2) persons critique others and are held accountable for their actions in a way in which inanimate objects are not; and 3) persons perceive an "oughtness" or "expectedness" in their social actions, sometimes so strongly that they report--quite contrary to the facts--that they "could not" do other than they did, or that they had "no choice." A rule, unlike a "norm," may but need not be socially shared. Difficulties may arise when one individual does not know the rules used by another. Conventionally, two types of rules are differentiated: constitutive and regulative.

Constitutive Rules. Constitutive rules specify how meanings at one level of abstraction may count as meaningful at another level of abstraction. For example, "you are beautiful" counts as "compliment." The sensitive reader knows, however, that "you are beautiful" in some cases counts as sarcasm or insult rather than compliment, thus we note that constitutive rules occur at all levels of hierarchical meaning. For example, in the episode Playing the Dozens, a game played by urban Black youths in America, a derogatory comment about Other's mother counts as "gamesmanship" rather than "insult," and to interpret it as an insult is to "call off" the episode.

The primitive form of a constitutive rule may be algebraicized as shown in Figure 2. This primitive form specifies that in a certain context, if specific antecedent conditions are satisfied, then meaning at one level of abstraction counts

as meaning at another level of abstraction. For example, constitutive Rule 1 in Figure 2 should be read: In the context of the episode "playing the dozens, if is the opponent's turn, then an insult to my mother and an inslut to my father both count as 'gamesmanship.'" In "playing the dozens" both players must share constitutive Rules 1 and 2 among others.

Figure 2 about here

Constitutive rules do not guide behavior. Rather, they integrate the hierarchy, showing meaning at one level of abstraction counts as meaning at another level.

Regulative Rules. Regulative rules guide sequential action and thus exist in only Levels 3, 4, and 5 of the hierarchy of meaning shown in Figure 1. The form of a regulative rule may be algebraicized as shown in Figure 3.

The primitive form specifies that in the context of certain forms of social action, if given antecedent conditions obtain, then there exists some degree of force for or against the performance of subsequent actions. The primitive form further indicates that within a context of social action if an antecedent condition is followed by specific action(s), then some consequences will follow. For example, regulative Rule 1 in Figure 3 should be read: In the episode of playing the dozens, if the opponent insults my parent, then it is obligatory to top his/her last insult in order to avoid the consequence of losing the game. Regulative rules are cognitive reorganizations of constitutive rules. Figure 3 shows how a regulative rule is built of two constitutive rules.

Figure 3 about here

The rule models of CMM contain meaningful content units at various levels of abstraction (speech acts, episodes, etc.) and structural relationships among these

content units. It is important to observe that the elements of the primitive forms in Figures 2 and 3 may be simply place markers for linkages which may have various strengths in certain situations. Some rules, e.g., are non-specific as to the temporal antecedent (A) of action. In initial interaction, there seems to be a rule which obligates equal talking time at all times within the episode. The same place-making function applies to the consequent unit (C). Unlike von Wright's practical syllogism which assumes purposive action and is thus limited in generality to task coordination episodes (Adler, 1978), our rule structures permit us to deal with situations in which individuals may be acting ritualistically or on the basis of an inflexible self definition with little regard to the consequences their acts will evoke (Toulmin, 197 ; Cronen and Pearce, 1978). Finally, we do not assume that human actors are always articulating their action to both life-scripts and elaborated episodes. Like a poor chess player, a conversant may make his or her choice of action contingent only upon Other's preceding act and an immediate consequent.

Differentia for Rule Structure.

The reader can observe from our foregoing discussion that the CMM rules are not simple declarative statements about observed regularities in behaviors or social expectations. Rather, these rules admit of variable structure. These structural variations make rules amenable to empirical study.

The following list summarizes structural variables in the measurement model of regulative rule.

1) Range of legitimate action. A specific rule may legitimize a wide range of action choices or, conversely, obligate a single specific act.

2) Act--antecedent linkage. The antecedent condition may "require" a specific responsive act with varying degrees of force. For example, a friend's hallway greeting may strongly obligate a reciprocal greeting, legitimate but not obligate sports talk, and prohibit an intensive self disclosure.

3) Act--consequent linkage. An actor may perform a specific act because he/she feels it to be more or less necessary to bring about consequent act(s). Of course, not all acts are articulated to particular consequents. Some come to be functionally autonomous (Allport, 1937) and are performed on the basis of the antecedent, episode, and lifescript that are salient to the actor (Cronen and Pearce, 1978).

4) Act--episode linkage. The performance of an episode may require some acts with greater force than other acts. In ritual the episode exerts an obligatory force on almost every act.

5) Act-life-script linkage. An individual's conception of "self-in-action" "who I am," may seem to necessitate some acts with greater force than other.

6) Consequent valence. The actor's perception of the desirability of Other's act which follows his/her own.

7) Episode valence. The actor's perception of the desirability of the pattern of which he/she is a part.

The Logic of Conversation.

The "actional" perspective on the interpersonal system imposed by our interest in conversation directs attention to systemic constraints on sequences of messages and meanings alternately produced by the communicators. Rather than focus on the internal dynamics of the system itself, we are interested in what and what variety of forms of conversation can be produced by interpersonal systems with particular content and structural properties. Note that we are not interested in predicting a specific message which might be made by any given person: consistent with our assumptions about the communication process, our focus is on the organizational pattern of sequential messages.

Overview of the Logics of CMM.

The juxtaposition of rules having the form described above creates an array of potential lines of action because the rule-governed act of each person is interpreted

(by other's constitutive rules) as the antecedent condition of the other's regulative rules, which invoke some force to a subsequent action, which the first interprets as the antecedent condition of one of his own regulative rules, etc. This interpersonal interlocking or meshing of rules to produce lines of action is illustrated in Figure 4. Because the theory specifies variation in rule structure, the form of

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Figure 4 about here

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the logic of conversation can vary from one episode to another. For this reason we refer to logics of conversation. In a subsequent section of this paper we will discuss how variations in rule structure produce predictable variations in the pattern of conversation.

Logics incorporate feedback when the speech act of one actor is compared to the intended consequent of the other. Unpredicted responses may lead to a renegotiation of the contextualizing episode. For example a teenage boy at dinner may make a request such as "can I have the car tonite?" The unexpected responsive act "how's the soup?" indicates to him that his parent does not want to continue the episode of "who gets the car" because the unexpected response seems to have no place in the boy's construction of a "who gets the car" episode. This model has demonstrated important heuristic value as a way of analyzing troublesome episodes in family relationships (Harris, 1978; Cronen, Pearce and Harris, in press) and in formal organizations (Harris and Cronen, 1978).

Alterations in a logic are produced when individuals' rules change in content or structure. Such change may be occasioned when actors perceive (1) consequents that are undesired and (2) freedom of action to alter their communication behavior. Suppose an actor realizes that Other's use of profanity in a particular episode counts for Other as "informality" not "blasphemy." Taking the role of the Other --

reconstructing Others rule system -- the actor may develop new rules such as these:

Episode X Friendly Chat With O

cR any point in the episode ⊃ [taking the name of deity ⟶ friendly informality]

Episode of Friendly Chat With O

rR [Other takes the name of the deity ⊃ (prohibited (sternly rebuke other for blasphemy)) ⊃ maintain friendly episode avoid being construed as pompus.]

Suppose, however, that the actor in our example is a fundamentalist minister who uses rules:

Life Script of a Spiritual Leader Getting to Heaven

cR in any episode at any point ⊃ [taking the Lord's name ⟶ blasphemy renunciation of one obligations as a role model]

Life Script of a Spiritual Leader Getting to Heaven

rR [there is blasphemy ⊃ (obligatory (denounce blasphemous behavior citing scripture)) ⊃ fullfill one's own lifescript]

The existence of very strong linkage of the speech act "denounce blasphemy..." to the preachers life script plus the conviction that that messages have true meanings which are not open to negociation among people might lead the preacher to continue following his regulative rule even if one outcome of its use is to prematurely terminate friendly conversations.

Distinctive Features of the Logics of CMM.

The logics of conversation that we have described embody these features: 1) Hierarchical contexting. 2) Episode-dependence. 3) Operators of deontic logic and

4) Interpersonal perspective.

Logic cannot be disassociated from epistemology. The logic of CMM encorporates an epistemology consistent with the four propositions concerning human behavior. The key conception of hierarchically organized meaning intrinsic to this logic is a fundamental departure from Aristotlian logic. Aristotle's syllogism requires a major premise that is an aggregation of particulars. The generalization "all men" in the famous sylloqism about Socrates in no way contextualizes and redefines the meaninq of an individual member of the class, as a higher-order contexting of molecular unit alters that meaning of the lower order units. Aristotle's rejection of hierarchical recontexting is made explicit in the Physics (225b 14-16) and in his famous dictum "A thing cannot be both A and not A." The logic of CMM is also non-Aristotlian with respect the episode-dependence of its rules. The rules a family uses for resolving conflict with the children may not resemble those employed when arguing the merits of Jimmy Carter. Thus, the proposed logic is "field-dependent" both in Toulmin's sense and in ways not treated by Toulmin. Toulmin's (1958) "fields" of argument are only defined by content and ignore relational aspects of context. The rules a college student uses for debating the political merits of Carter with his/her parents at Thanksgiving dinner will not necessarily resemble the rules used for the same topic with his/her roommate. For this reason we prefer to call the logic "episode-dependent." Toulmin's position is extended in yet another way by the logic of CMM. The rule structure proposed here can vary within the basic form. Thus, the structure as well as the content of the logic is episode dependent. The rules used by a good salesman, for example, would probably exhibit a range of alternatives for action and strong act-consequent linkages, while the rules employed by two people who feel "locked in" to an episode of symmetrical esculation probably exhibit low range of alternative actions, and functional autonomy. The logic of CMM is also distinguished by its operators. Because it is

intended to function in the realm of social action the operators are not those of existence ("all A's are B") but of "oughtness." The particular operators we employ were originally introduced by vonWright (1951). Unlike vonWright's deontic logic, or Brown's hierarical logic (1973) this episode-dependent logic is not based upon the conception of formal validity but instead is in the tradition of Toulmin (1972) who has persuasively argued the irrelevance formalistic standards to human understanding. Finally, we call attention to the distinctly interpersonal nature of the logics of CMM. A logic of conversation is formed when the rules of two or more conversants are conjoined. There is no way to predict the pattern of conversation from the rules of one person alone.

The Logics of CMM and Logics of Truth-Claims.

The logics of conversation are deontic logics and thus operate in the realm of appropriateness-claims and felicity conditions rather than the realm of truth-claims and truth conditions (Austin, 1962). However, it is clear that conversants often feel "obligated" to follow presentational forms such as Aristotlean syllogistic, analogical patterns, etc. CMM provides a superordinate framework for observing the orientation of conversation to particular logics. It is assumed that mankind possesses a number of logics for organizing meanings (Stewart, 1972) which are appropriate depending upon the episode and culture. Compare, for example, these two regulative rules:

episode of professional talk among scientists of the positivistic tradition

[challenged to show how your prediction was derived ⊃ (obligatory (show deduction of hypothesis from theory))] ⊃ satisfy request and show one's membership in the community of positivistic scientists

episode of religious talk among fundamentalists

[challenged to show how your prediction was derived ⊃ (legitimate (draw analogy to scriptures)) (legitimate (appeal to personal revelation))] ⊃ satisfy request and show one's membership in the community of fundamentalists

Thus the rules of conversation that operate within a specific episode may legitmate, obligate, or prohibit certain logical forms for the presentation of truth-claims. The use, or failure to use, certain forms for the presentation of truth-claims will, of course, have relational (speech act) meaning for the conversants (Cronen, 1978). The presentational forms that an epistemic community may endorse for making knowledge claims may not relate closely to the actual discovery patterns which individuals employ to arrive at truth claims (Kaplan, 1964). The intrapersonal patterns of discovery are themselves probably field dependent -- that is adjusted to the particular subject matter at hand (Bruner, Goodnow, and Austin, 1957). The relationships among the logics of conversation, the presentational forms for establishing truth-claims and intrapersonal discovery processes may be summarized as shown in Figure 5.

Figure 5 about here

APPLICATIONS

The logic of the coordinated management of meaning is useful both as a diagnostic device for explicating conversations, and as a huristic for the generation of testable hypotheses.

The Logic of CMM and the Explanation of Conversations.

The utility of the logic of CMM for explaining conversation has been explored in two previous studies. Harris (1978) has shown its utility as a diagnostic tool for studying troublesome family episodes, and Harris and Cronen (1977) have used it to illuminate organizational communication episodes.

To illustrate the explanatory power of the logic of conversation, we have invented a hypothetical conversation between a clinical and a social psychologist.

As shown in Figure 6, we have exploited every possible stereotype to produce a poorly coordinated conversation. Both persons rely on the "logic" of their rule systems to supply information which contextualizes and interprets the Other's statement, and which guides their subsequent behavior. However, the "episodes" which they draw upon as a description of what they are doing with each other differ enough to make each successive message reduce the extent to which they reciprocally understand each other. In this hypothetical but not unrealistic conversation, we expect some socially traumatic event to occur soon.

In this example, it is important to note that each person acted reasonably and consistently with his own rules, but that the conjoint product of their action was incoherent. Further, assuming that each persons rule system has a relatively stable structure, communication problems of this kind are attributable to the poor "fit" between them. Two social psychologists would have unproblematic, if somewhat brief, greeting episodes and two clinical psychologists would have unproblematic, if relatively long, pleasant conversations. In either case, the processes of conversation may be accounted for by citing the rule structure.

Figure 6 about here

Implications for Empirical Research.

Episodes are created by the conjoing of actors' rules -- rules which we contend exhibit variable structural properties. This position leads us to the general proposition that differences in the values of the structural variables described above will differentiate among types of episodes. Further, the description of episode types permits the construction of an array of specific predictions about the characteristics of each variable and episode type. These predictions are summarized in Figure 7.

Figure 7 about here

Space does not permit a detailed discussion of all episodes indicated in

this matrix. However our position can be illuminated by means of a few examples. An enigmatic episode as one which actors do not know how to act or how meanings will come to evoke consequences (Forgas, 1976). Figure 6 specifies that in enigmatic episodes there should be very weak perceived linkage of life-script, antecedents or consequents to any speech act the actor may consider. The range of possible acts is unknown and valence of consequents tends to be negative as the actor's tentative efforts are followed by long pauses, puzzled expressions, irritation or outright rejection by those who know what is appropriate. Thus, as a whole, the enigmatic episode has a negative valence.

An unwanted, repetitive pattern is one in which the conversants feel emmeshed in a pattern beyond their control (Walton, 1969; Minuchen, 1974). Unwanted repetitive patterns are expected to entail rules with these characteristics: strong antecedent-act linkage, narrow range of alternative speech acts, acts that tend to be functionally autonomous of consequents, strong act-life script linkage and undesirable consequent acts.

Value expressive rituals are predicted to entail strong linkages of antecedents, life-script, episode, to speech acts at each talking turn. Unlike unwanted repetitive patterns, however, there are predicted to exist strong act-consequent linkages. The episode is not an accidental product of the rules as in unwanted patterns but is a shared social construction with positive valence. In a religious ceremony that has great significance for a participant, the participant is predicted to feel that his/her acts are obligatory because of the antecedent condition (for example, the youngest child at a Passover Seder has asked the "four questions"), because of the consequent (the act of responding to the "four questions" is necessary to bring about the next part of the service), because of the episode (the actor strongly wishes to bring about a well-run service), and because of a life-script (the actor feels that his/her speech act in this episode is required by their self concept--i.e., observant Jew). The consequent acts should be positively

valenced and the valence of the whole episode very positive. If the celebrant regards the ceremony as a perfunctory, not a value expressive ritual, it is predicted that the linkage of act to life-script would be weak, and the valence of the episode and consequent acts less positive. In either type of ritual the range of alternative acts is low or nonexistent.

DISCUSSION

This paper describes a "logic of conversation" which purports to explain the processes by which persons are able to produce coherent sequences of messages even though neither says all that he means or expects to be heard as saying. Such a logic is important because the processes of apparently mundane communication are in fact the location of powerful processes in which the individual and the society is created and maintained.

This "logic," of course, is one among many, and more cumbersome than most. It is appropriate to indicate some of the characteristics which commend it for further consideration.

First, it is inextricably linked to a larger theory of communication and the social order which has specifiable "generality" and demonstrable "necessity." This permits explications of conversations to be incorporated into an analysis of types of interpersonal relationships, structural properties of organizations, etc.

Second, this logic's complexity permits the explanation of particular conversations without a priori assumptions about the simplicity of individual action or rigidity of the social order. This allows us to escape the twin errors of assuming that all conversation must be explained either as "responses" to "stimuli" or as purposive action. Further, it allows us to escape Grice's error of assuming a universal logic necessitated by the structure of conversation or the ethnomethodologist's mistake of assuming that there is indeed a coherent order behind the

phenomena of sociation. Finally, it avoids the limitations of Aristotelian logic which attempts to discern enthymemes in the gaps between messages.

Third, this logic is so structured that the "entailments" are empirically measurable rather than being the product of the feceund imagination of a theorist. As such, the strength of the entailments becomes variable rather than dichotomies, and the presence of the entailments are matters for empirical verification rather than a priori or post hoc stipulation.

Fourth, the logic of CMM permits an observer to critique action as well as describe, explain and (to a limited extent) predict it. By measuring the logic of the system in which a person communicated, it is possible to judge whether a given act was, e.g., conventional or daring; "forced" or "discretionary;" etc.

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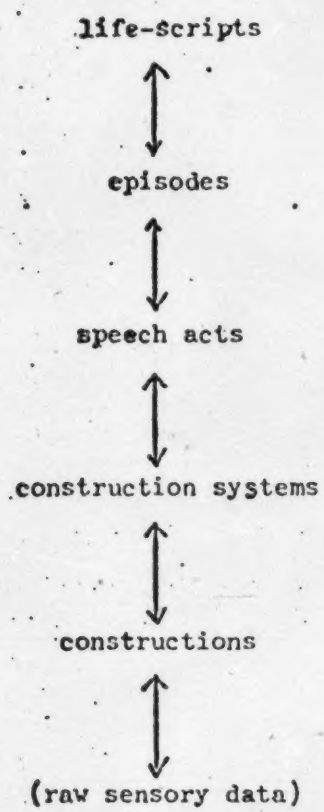

Figure 1: A hierarchy of meanings

Primative Form of a Constitutive Rule:

$$cR = \frac{MC_k}{A \supset [MC_i \rightarrow MC_j]}$$

where: A = antecedent conditions
MC_i = meaningful construal at abstraction level "i."
MC_j = meaningful construal at abstraction level "j."
MC_k = meaningful construal at abstraction level "k."
$\rightarrow$ = read "count as."
$\ulcorner\urcorner$ = read in the context of . . .
$\supset$ = read "if ... then"

Examples of Constitutive Rules:

cR_1 = episode: Playing the Dozens

opponent's turn $\supset$ [insult to my mother / insult to my father] $\rightarrow$ gamesmanship

cR_2 = episode: Playing the Dozens

opponent insulting my parent $\supset$ [top last insult $\rightarrow$ obligatory]

Figure 2: Constitutive Rules

Primative Form of Regulative Rules:

$$rR = \overline{\left[A \supset (Do \quad (ACTN_i))_{1-n}\right] \supset C}^{\,ACTN_j}$$

where rR = regulative rule
A = antecedent condition
DO = deontic operator (obligatory; legitimate; irrelevant; prohibited)
$\supset$ = read "if ... then"
$ACTN_i$ = read as "action": a class term for specific speech act(s) or extended episode(s)
$ACTN_j$ = meaningful construction of social action at a level of abstraction ("j") higher than that of the ACTN component "i."
C = consequent conditions

Examples of Regulative Rules:

rR_1 = episode of Playing the Dozens

[opponent insults my parent $\supset$ (obligatory (top last insult))] $\supset$ avoid losing

rR_2 = life script of being a brother

[younger other initiates playing the dozens $\supset$ (legitimate (engage in episode of playing the dozens)) (legitimate (scoff at that "kids game"))] $\supset$ maintain status in the group

Derivation of Regulative Rule From Constitutive Rules:

cR_3 = formal dining episode

at table $\supset$ [slobbering soup $\longrightarrow$ prohibition]

$+cR_4$ = formal dining episode

at table $\supset$ [slobbering soup + prohibition $\Rightarrow$ unintelligent, low class, rude]

$-rR_5$ = formal dining episode

[at table $\supset$ (prohibited (slobber soup))] $\supset$ avoid being construed as unintelligent, rude and low class

Figure 3: Regulative Rules

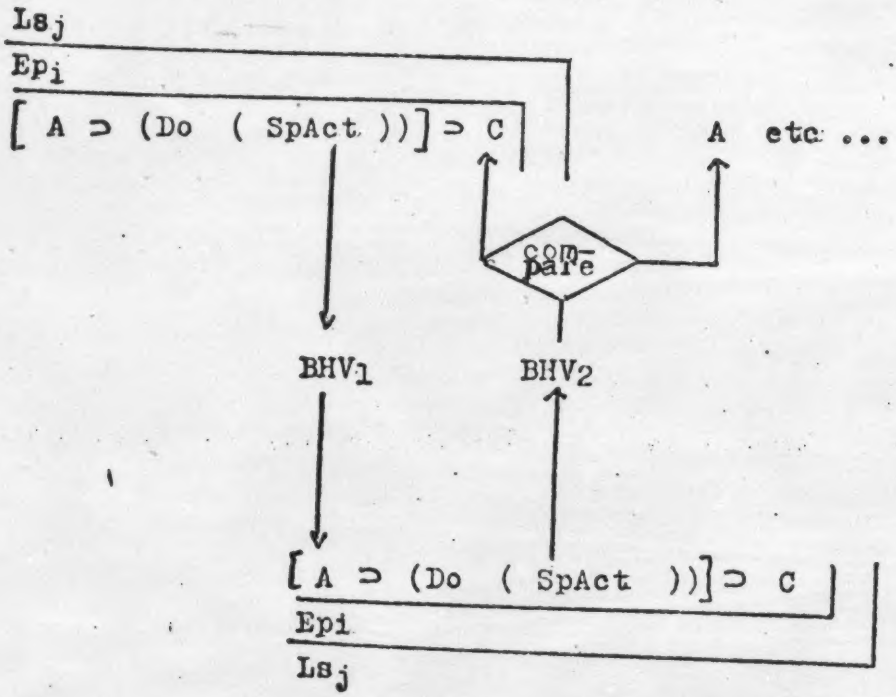

Figure 4: Logic of Conversation Formed by the Interlocking of Two Person's Rules

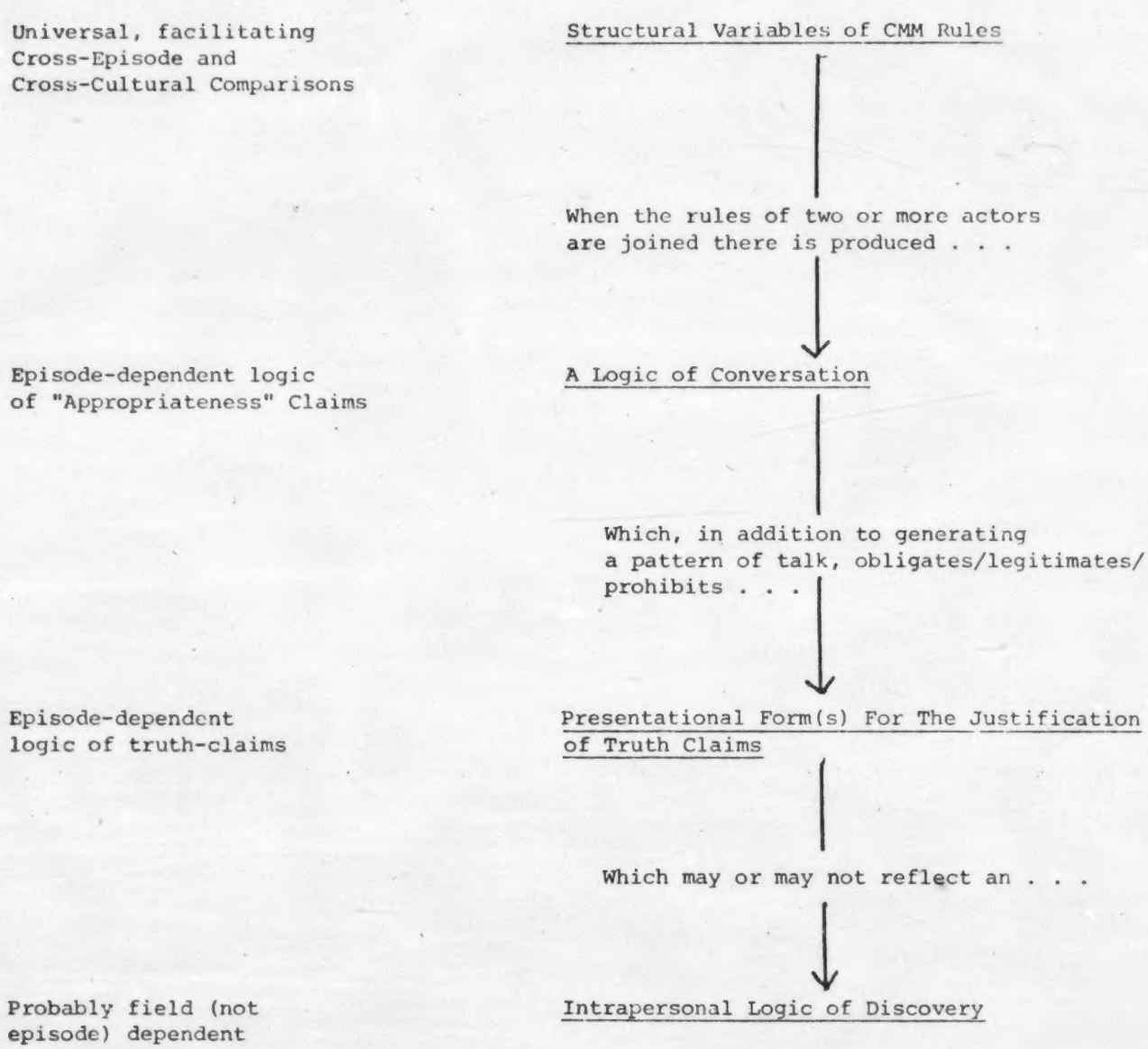
Universal, facilitating
Cross-Episode and
Cross-Cultural Comparisons
Structural Variables of CMM Rules
When the rules of two or more actors
are joined there is produced . . .
Episode-dependent logic
of "Appropriateness" Claims
A Logic of Conversation
Which, in addition to generating
a pattern of talk, obligates/legitimates/
prohibits . . .
Episode-dependent
logic of truth-claims
Presentational Form(s) For The Justification
of Truth Claims
Which may or may not reflect an . . .
Probably field (not
episode) dependent
Intrapersonal Logic of Discovery

Figure 5: The Logic of CMM in Relation to Logics of Truth-Claims

EPISODE TYPES

Structural Variables	Enigmatic Episode	Value Expressive Ritual	Perfunctory Ritual	Unwanted Repetitive Pattern	Positive Spiral	Alienating Sequence	Coordinated Management
Antecedent-Speech Act Linkage	Very Weak	Very Strong	Very Strong	Very Strong	Very Strong	Moderate to Strong	Moderate to Strong
Episode-Speech Act Linkage	Very Weak	Very Strong	Strong	None[a]	None[a]	Strong	Strong
Life-Script-Speech Act Linkage	Very Weak	Very Strong	Weak	Strong	Strong	Very Weak	Strong
Speech Act-Consequent Linkage	Very Weak	Very Strong	Strong	Functional Autonomy	Functional Autonomy	Strong	Strong
Range of Alternative Speech Acts	UNK	Very Narrow	Very Narrow	Narrow	Narrow	Moderate	High
Consequent Valence	NEG.	POS.	NEUT.	NEG.	POS.	POS.	POS.
Episode Valence	NEG.	Very POS.	NEUT.	NEG.	POS.	NEG.	POS.

UNK = Unknown.

a = Actors do not intend the maintenance of episode and may only be aware of the episodic punctuation post hoc as in the gloss "Oh, Darn." "We did it again."

Figure 7. Analytic Schema

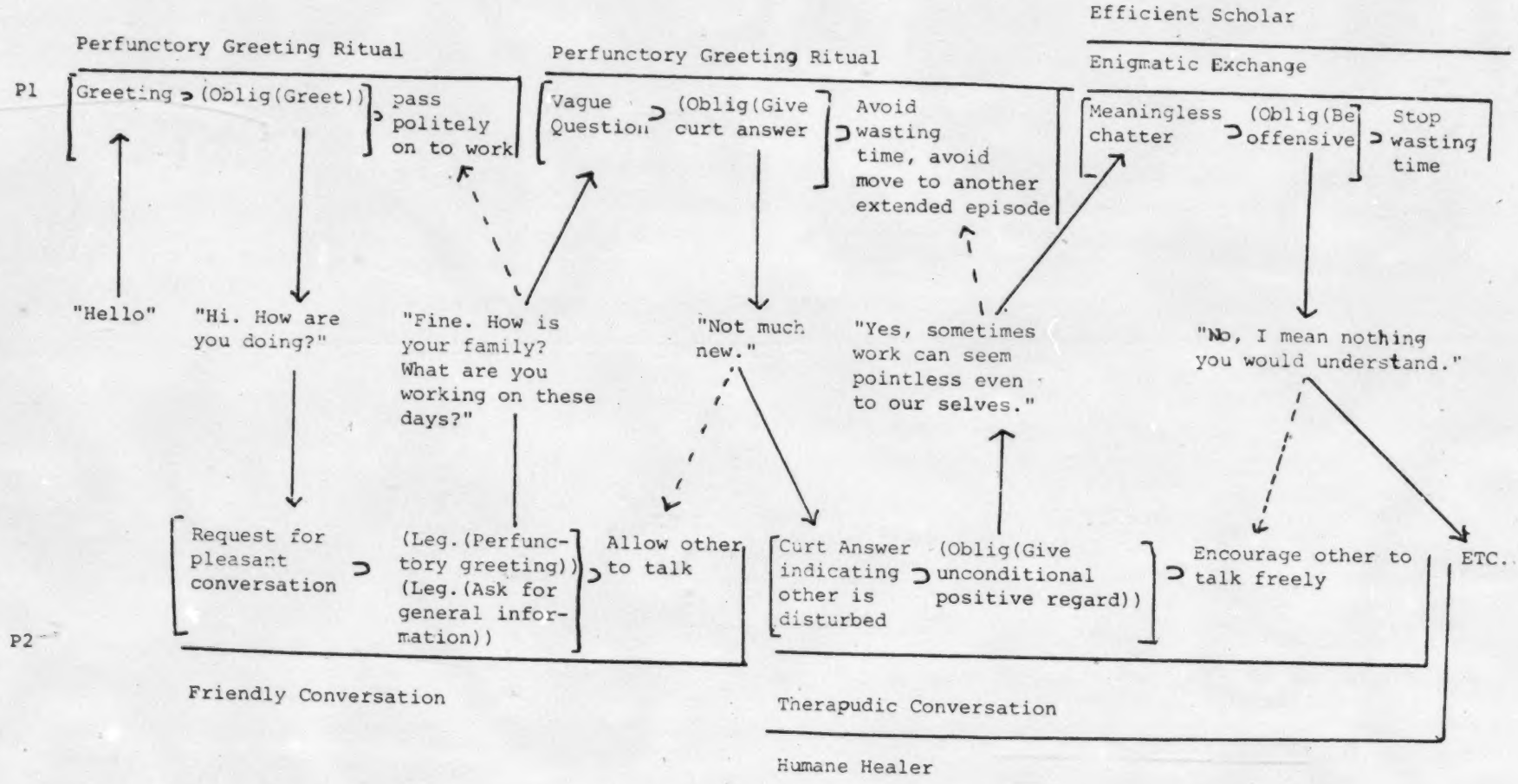
Perfunctory Greeting Ritual
Perfunctory Greeting Ritual
Efficient Scholar
Enigmatic Exchange
P1
Greeting ⊃ (Oblig(Greet))
pass politely on to work
Vague Question ⊃ (Oblig(Give curt answer
Avoid wasting time, avoid move to another extended episode
Meaningless chatter ⊃ (Oblig(Be offensive
Stop wasting time
"Hello"
"Hi. How are you doing?"
"Fine. How is your family? What are you working on these days?"
"Not much new."
"Yes, sometimes work can seem pointless even to our selves."
"No, I mean nothing you would understand."
Request for pleasant conversation ⊃ (Leg.(Perfunctory greeting)) (Leg.(Ask for general information))
Allow other to talk
Curt Answer indicating other is disturbed ⊃ (Oblig(Give unconditional positive regard))
Encourage other to talk freely
ETC.
P2
Friendly Conversation
Therapudic Conversation
Humane Healer

Figure 6. The Logic of Conversation as an Explanation of a Hypothetical Interaction

*The model is read by beginning with the message on the extreme left, then following the arrows and "horseshoes." The arrows depict the constitutive rule's operation of "counts as," and the "horseshoes" the regulative rule's operation of "if, then." The ⌐ or ⌊ symbols are read as "in the context of."

**P1 is a social psychologist and P2 is a clinical psychologist.